lab # E

MATERIALS RESEARCH LABORATORY LTD.

93 Caesar Avenue
Nepean, Ontario
Canada K2G 0A8
Phone (613) 226-7598
226-7699

CONTRACT REPORT NO. 0SQ83-00182
REQ NO. 3-9164-8

March 30, 1984

Dr. H.F. Steger
Coordinator, CCRMP
CANMET, Mineral Sciences Laboratories
Dept. of Energy, Mines & Resources
405 Rochester St.
Ottawa, Ont.
K1A 0G1

Dear Dr. Steger:

Re: DSS file no. 03SQ.23440-3-9164-8

Many thanks for awarding us the contract on "Certification of CCRMP Reference Materials. We have enclosed the results obtained in our laboratory as outlined in our proposal of October 21, 1983. We have also enclosed our invoice for performing the work. We will be very pleased to answer any questions regarding the detailed methodology or will be prepared to provide any additional information at any time.

Many thanks again.

Yours sincerely,

MATERIALS RESEARCH LABORATORY LTD.

Sudesh K. Singh

Sudesh K. Singh, Ph.D.
President

SKS/ad
Encl.

MICROMEDIA

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TABLE 1

CHEMICAL CONSTITMENTS AND THEIR
CONCENTRATIONS IN THE RECOMMENDED MATERIALS

Reference Material	Element	Method of Analysis	Subsamples	Determined Concentration
AK-1a	W	X.R.F.	1	0.020%
			2	0.020%
			3	0.020%
			4	0.019%
			5	0.021%
AP-2	Sn	Atomic Absorption Hydride	1	0.042%
			2	0.045%
			3	0.045%
			4	0.045%
			5	0.045%
CZN-1	Sn	Atomic Absorption Hydride	1	64.00 ppm
			2	60.00 ppm
			3	68.00 ppm
			4	60.00 ppm
			5	68.00 ppm
	Bi	Atomic Absorption Hydride	1	26.39 ppm
			2	26.35 ppm
			3	25.68 ppm
			4	26.34 ppm
			5	25.35 ppm
	Sc	X.R.F. Plasma (ICP)	1	10.00 ppm
			2	12.00 ppm
			3	10.00 ppm
			4	10.00 ppm
			5	10.00 ppm
CPS-1	Mn	Atomic Absorption Acid Digestion	1	0.0389%
			2	0.0396%
			3	0.0397%
			4	0.0416%
			5	0.0399%
	Sn	Atomic Absorption Hydride	1	36.00 ppm
			2	40.00 ppm
			3	44.00 ppm
			4	32.00 ppm
			5	40.00 ppm

TABLE 1 cont.

Reference Material	Element	Method of Analysis	Subsamples	Determined Concentration
CPB-1	Se	X.R.F. Plasma (ICP)	1	30.00 ppm
			2	30.00 ppm
			3	30.00 ppm
			4	30.00 ppm
			5	30.00 ppm
CCU	Fe	Atomic Absorption Acid Digestion	1	35.23%
			2	34.88%
			3	34.88%
			4	34.87%
			5	35.01%
	S	Wet Chemical	1	35.78%
			2	35.53%
			3	35.79%
			4	35.58%
			5	35.76%
	As	Atomic Absorption Hydride	1	32.00 ppm
			2	44.00 ppm
			3	58.00 ppm
			4	40.00 ppm
			5	42.00 ppm
	Se	X.R.F.	1	120.00 ppm
			2	120.00 ppm
			3	130.00 ppm
			4	120.00 ppm
			5	110.00 ppm